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(b) contacting an aqueous solution of plasmid with said mixture prepared in step (a) to provide a single phase; and

(c) removing said organic solvent to provide a suspension of plasmid-lipid particles, wherein said plasmid is encapsulated in a lipid layer and said particles are resistant to degradation in serum, and wherein the particles have a diameter ranging from about 50 to about 150 nm.

15. A method in accordance with claim 10, wherein said non-cationic lipids comprise a polyethylene glycol-lipid conjugate.

16. A method in accordance with claim 15, wherein said polyethylene glycol-lipid conjugate is a PEG-ceramide conjugate.

17. A method in accordance with claim 14 further comprising;

(d) sizing said plasmid-lipid particles to achieve a uniform particle size.

18. A method in accordance with claim 10, wherein said cationic lipids are selected from the group consisting of DODAC, DDAB, DOTAP, DOTMA, DOSPA, DOGS, DC-Chol and combinations thereof.

19. A method in accordance with claim 14, wherein said non-cationic lipids are selected from the group consisting of DOPE, POPC, EPC and combinations thereof.

20. A method for introducing a plasmid into a cell, comprising:

(a) preparing a plasmid-lipid particle according to the method of claim 14; and

(b) contacting said cell with said plasmid-lipid particle for a period of time sufficient to introduce said plasmid into said cell.

21. A method in accordance with claim 20, wherein said plasmid-lipid particle comprises a plasmid, DODAC, POPC and a PEG-Ceramide selected from the group consisting of PEG-Cer-C₂₀ and PEG-Cer-C₁₄.

22. A method in accordance with claim 20, wherein said plasmid-lipid particle comprises a plasmid, DODAC, DOPE and a PEG-Ceramide selected from the group consisting of PEG-Cer-C₂₀ and PEG-Cer-C₁₄.

23. In a method of gene therapy involving the introduction of a plasmid via a plasmid-lipid composition into a cell resulting in sufficient expression to effect a phenotypic change, the improvement which comprises

(a) preparing a plasmid-lipid particle according to the method of claim 14; and

(b) contacting said cell with said plasmid-lipid particle for a period of time sufficient to introduce said plasmid into said cell.

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24. A method for the preparation of serum-stable plasmid-lipid particles, comprising:

a) combining a plasmid with cationic lipids in a first detergent solution to provide a coated plasmid-lipid complex;

b) contacting non-cationic lipids with said coated plasmid-lipid complex to provide a second solution comprising detergent, a plasmid-lipid complex and non-cationic lipids and adding a polyethylene glycol-lipid conjugate to said second solution; and

c) removing said detergent from said second solution to provide a solution of serum-stable plasmid-lipid particles, wherein said plasmid is encapsulated in a lipid bilayer and said particles are resistant to degradation in serum, and wherein the particles have a diameter ranging from about 50 to about 150 nm.

25. A method for the preparation of serum-stable plasmid-lipid particles, comprising:

a) preparing a mixture comprising cationic lipids and non-cationic lipids in an organic solvent, wherein said non-cationic lipids comprise a polyethylene glycol-lipid conjugate;

b) contacting an aqueous solution of plasmid with said mixture prepared in step (a) to provide a single phase; and

c) removing said organic solvent to provide a suspension of plasmid-lipid particles, wherein said plasmid is encapsulated in a lipid bilayer and said particles are resistant to degradation in serum, and wherein the particles have a diameter ranging from about 50 to about 150 nm.

26. A method in accordance with claim 25, wherein said polyethylene glycol-lipid conjugate is a PEG-ceramide conjugate.

27. A method for introducing a plasmid into a cell, comprising:

(a) preparing a plasmid-lipid particle according to the method of claim 25; and

(b) contacting said cell with said plasmid-lipid particle for a period of time sufficient to introduce said plasmid into said cell.

28. A method in accordance with claim 27, wherein said plasmid-lipid particle comprises a plasmid, DODAC, POPC and a PEG-Ceramide selected from the group consisting of PEG-Cer-C₂₀ and PEG-Cer-C₁₄.

29. A method in accordance with claim 27, wherein said plasmid-lipid particle comprises a plasmid, DODAC, DOPE and a PEG-Ceramide selected from the group consisting of PEG-Cer-C₂₀ and PEG-Cer-C₁₄.

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